## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, ILLINOIS 60604

DATE: SEP 1 6 2016

**SUBJECT:** CLEAN AIR ACT INSPECTION REPORT

Omni Source, Indianapolis, Indiana

**FROM:** Cindy Schafer, Environmental Engineer

AECAB (MN/OH)

**THRU:** Brian Dickens, Section Chief

AECAB (MN/OH)

TO: File

## **BASIC INFORMATION**

Facility Name: OmniSource

Facility Location: 2205 South Holt Rd, Indianapolis, IN 46241

Date of Inspection: November 16, 2015

Lead Inspector: Cindy Schafer, Environmental Engineer

## **Other Attendees:**

- 1. Dakota Prentice, Environmental Engineer, U.S. EPA
- 2. Marie St. Peter, Environmental Engineer, U.S. EPA
- 3. Stephen Dixon, Environmental Engineer, IDEM
- 4. Dale Baker, Shredding Manager, Omni Source
- 5. Andrew Mallory, Safety Manager, Omni Source

Purpose of Inspection: Partial compliance inspection

Facility Type: Metal shredder

**Arrival Time:** 12:05pm EST **Departure Time:** 1:55pm EST

**Inspection Type:** 

Announced inspection	ced Inspection	☐ Announced	
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#### **OPENING CONFERENCE**

- ☐ CBI warning to facility provided

The following information was obtained verbally from Dale Baker or Andrew Mallory unless otherwise noted.

**Company Ownership:** Steel Dynamics bought the property at 2205 South Holt Road in 2007. In 2008, OmniSource LLC built the scrap steel shredding facility. Steel Dynamics is the parent company and OmniSource is the operator.

## **Process Description:**

OmniSource receives industrial and retail scrap metal via truck. Industrial scrap includes metal scrap from stamping plants, new production scrap and automobile scrap. Retail scrap includes metal delivered by individuals such as automobiles, old appliances, and other household scrap. Trucks carrying scrap metal are scanned for radiation, weighed, off-loaded and the scrap metal is stockpiled. The scrap metal is then sorted and cut down to size as necessary with cutting torches. The scrap metal is then moved to the dry conveyor which feeds the shredder. From the shredder the scrap metal is divided into magnetic and non-magnetic scrap and then sized. Copper, brass, and aluminum scrap are sent to an OmniSource facility in Fort Wayne, Indiana for separation and processing. Other metals are shipped to various steel mills and foundries in the Midwest. OmniSource sells its scrap mainly to Steel Dynamics, but also supplies other steel plants. Approximately 60% of the scrap metal is shipped out via truck, the other 40% is shipped via rail.

Particulate emissions from the metal shredder are controlled by a water injection system. The water flow rate into the shredder is dictated by the workload of the 6000 horse power electric motor on the shredder. The maximum flow rate of the water injection system is 90 gallons per minute.

An air system is used to separate metals by type within the non-magnetic metal separation building. The air is exhausted to a cyclone to control particulate emissions.

**Staff Interview:** There are about 90 employees at the facility; 75 of which are labor. The plant operates 24 hours a day, five days a week when demand for scrap metal is high. OmniSource receives approximately 15 retail cars each month. These cars are inspected by OmniSource. Mercury switches are removed, fluids are drained from the vehicles, and refrigerant is collected. OmniSource maintains records of each inspection and mercury switch removed from retail cars. The industrial auto scrap received by Omni Source is purchased from a secondary buyer that removes mercury switches, drains any liquids and crushes the vehicles prior to delivery. Currently, the plant throughput is approximately 400 tons per day of scrap received. Over the summer the plant received approximately 13,000 – 16,000 tons per day of scrap. Maximum capacity of the plant is approximately 45,000 tons per day of scrap received or 35,000 tons per day of scrap shipped out. At the time of the inspection, the metal shredder was not operating. The

facility was preparing scrap to be shredded the next day. At 1:30pm, Andrew Mallory joined the inspection.

#### **TOUR INFORMATION**

EPA toured the facility: Yes

## **Data Collected and Observations:**

9 photos were taken of various processes at the facility. See the Appendix A: Photo Log for additional information.

Field Measurements: were not taken during this inspection.

## **CLOSING CONFERENCE**

#### **Requested documents:**

- Records of mercury switches removed: July 2015;
- Records of CFC liquids drained: July 2015;
- Shredder throughput July 2015 with amounts of vehicular and non-vehicular scrap metal differentiated; and
- Annual throughput for gasoline tank.

### Responses to follow-up questions:

- What processes generate HAPs, VOCs and toluene emissions?
  - o Auto shredder generates HAP, VOC and toluene emissions
- What is the basis for the permit limits for HAPs, VOCs and toluene?
  - o Limits set based on emission factors from data from a facility in Toledo, and the amount of scrap processed on an annual basis.

#### **SIGNATURES**

Lead Inspector: Grant She Date: 11/24/2015

Section Chief: Charle tall for Dickens Date: 19 September 2016

#### **APPENDICES AND ATTACHMENTS**

Appendix A: Photo Log

Facility Location: 2205 South Holt Rd., Indianapolis, IN 46241

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# APPENDIX A: PHOTO LOG



Figure 1: Diesel Tank. Omni Source fuels cranes and fork lifts with diesel from tank.



Figure 2: Dry conveyor to metal shredder.

Facility Location: 2205 South Holt Rd., Indianapolis, IN 46241



Figure 3: ASR: separation of magnetic and non-magnetic metals.

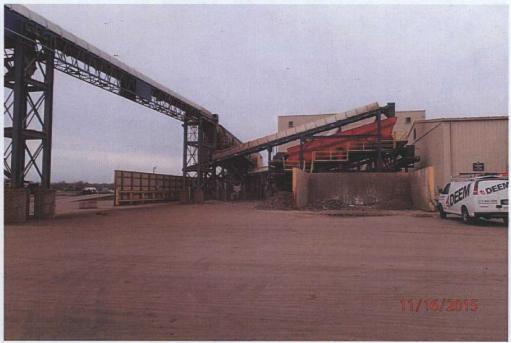


Figure 4: Conveyor to metals sizing operations.

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Figure 5: Separation of metallic and non-metallic metals.



Figure 6: Eddy current machine.

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Figure 7: Eddy Current machine. Separates out aluminum, brass and copper.

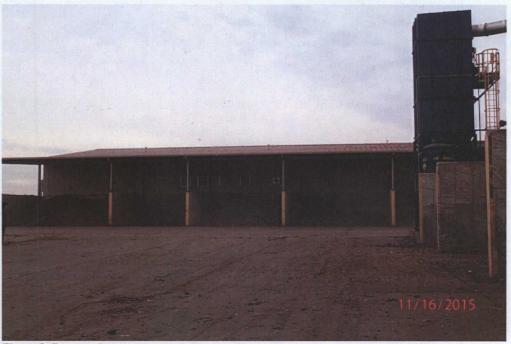


Figure 8: Processed scrap storage.

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Figure 9: Metal separation by mass.